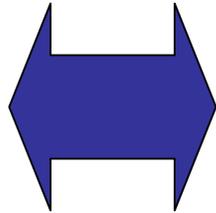


Training and Career Development Evaluation Plan

Trainee

- Level of Training
- Field of Training
- Personal Factors
 - Age/Sex/Ethnicity
- Selection Factors
- Test Scores
- Program Factors
 - Duration
 - Completion
- Institutional Factors



Career Outcome Factors

- Research Involvement
 - Further Training
 - Employment
 - Level
 - Setting
- Publications
- Citations
- Patents
- Grant Applications/Awards
- Advisory or Review Panels
- Clinical Involvement
 - Specialty Certifications
 - Clinical Activities

Overview of Early Career Outcomes and Group Comparisons in the Biomedical Sciences

Outcome	Observed Results			More Progress on Outcome for NRSA Trainees and Fellows vs.	
	NRSA Trainees and Fellows	Ph.D.s from NIH Training Institutions	Ph.D.s from Non-NIH Training Institutions	NIH Training Institutions	Non-NIH Training Institutions
Completed Ph.D. in less time (years) ^a	6.5	6.9	7.0	+	+
Pursued postdoctoral training ^b	77.9	59.9	47.6	+	+
Working in a research career position in 1995	81.3	74.0	69.8	+	+
Had academic, tenure-line position	39.3	29.1	32.0	+	+
Employed by top-ranked academic institution	36.6	23.2	15.7	+	+
Applied for one or more NIH/NSF grants	46.9	35.0	29.6	+	+
Awarded an grant (of those who applied)	66.8	55.0	47.2	+	+
Number of post-Ph.D. journal publications ^c	12.8	9.7	8.9	+	+
Average citations to published articles ^c	28.5	24.7	18.9	+	+

Note. Unless indicated otherwise, included are those individuals who received their Ph.D. in the biomedical sciences between 1981 and 1988. A “+” indicates the observed difference (unadjusted) was significant and in the direction where NRSA trainees and fellows outperformed their comparison group counterparts favorable ways. Enclosing the “+” by a box indicates that NRSA predoctoral support was found to be statistically significant in helping to explain the observed difference, after adjusting for the influence of other variables; shading of the box indicates that its role was marginally significant ($p < 0.06$).

^a1981-92 Ph.D.s

^b1981-90 Ph.D.s

^c1981-82 Ph.D.s

Evaluation of NIH Extramural Training and Career Development Programs

Central Data Available

- National Research Service Awards
 - ✓Trainees
 - ✓Fellows
- Individual Career Development Awards

No Central Data Available

- Institutional Career Development Awards (K12)
- Education Grants (R25)
- Minority Supplements (SITS)
- Supplements for Individuals with Disabilities (SITS)
- Loan Repayment (LRP database)
- Research Assistants and Associates
 - ✓Graduate Students
 - ✓Postdoctorates

Source of Evaluation Information

Trainee

•Level of Training	-----	2271 – TFF
•Field of Training	-----	2271 – TFF
•Age/Sex/Ethnicity	-----	2271 – TFF
•Test Scores	-----	ETS
•Duration of Training	-----	2271 – TFF
•Completion of Training	-----	2271 – TFF
•Degree Earned	-----	2271 – TFF

Career Outcome Factors

•Comparison Groups	-----	DRF
•Further Training/Education	-----	SDR & TA Module
•Employment Setting/Rank	-----	SDR, FRS, IRP
•Publications	-----	NLM & ISI
•Citations	-----	ISI
•Grant Applications/Awards	-----	398/416 – CGAF
•Patents	-----	i-Edison
•Advisory or Review Panels	-----	Committee Management
•Clinical Certification	-----	FRS
•Clinical Activities	-----	FRS

FRS = AAMC Faculty Roster System
 NLM = National Library of Medicine
 ETS = Educational Testing Service
 TFF = Trainee Fellow File
 IRP = Intramural Research Program

SDR = NSF/NIH Survey of Doctoral Recipients
 ISI = Institute of Scientific Information
 DRF = Doctorate Record File – Surv. Earned Doc.
 CGAF = Consolidate Grant Applicant File

Professional Profile (PPF)

1. Personal Information

- Name
- SSN
- Sex
- Ethnicity
- Race
- Date of Birth
- Address
- Phone Number
- FAX Number
- E-Mail
- Citizenship
- Disability

2. Education

- Degree Awarded/Expected
- Year Awarded/Expected

- Institution
- Major
- Minor

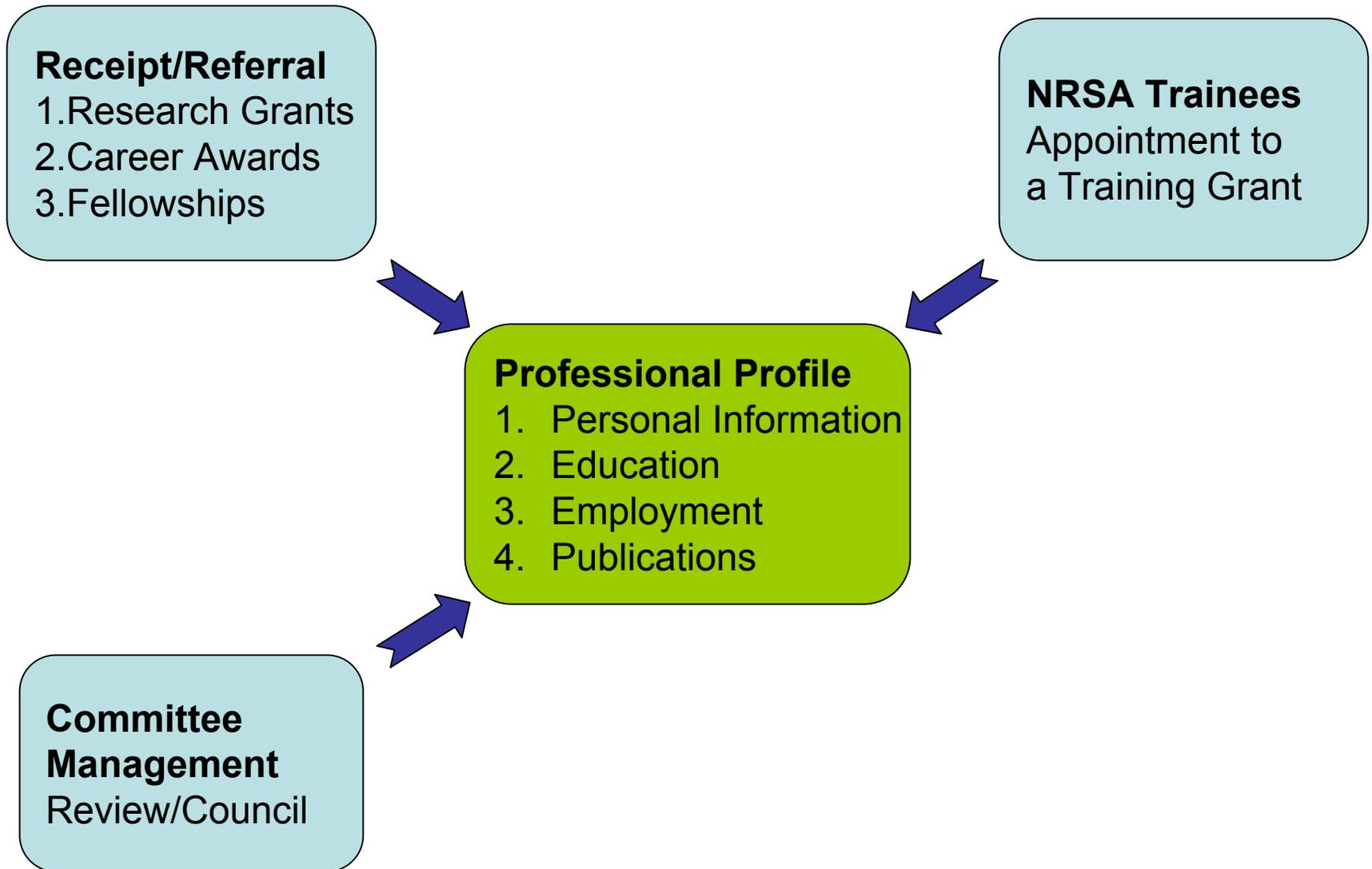
3. Employment

- Employer
- Address
- Work Phone
- Work FAX
- Work E-Mail
- Start Date
- End Date
- Rank
- Position

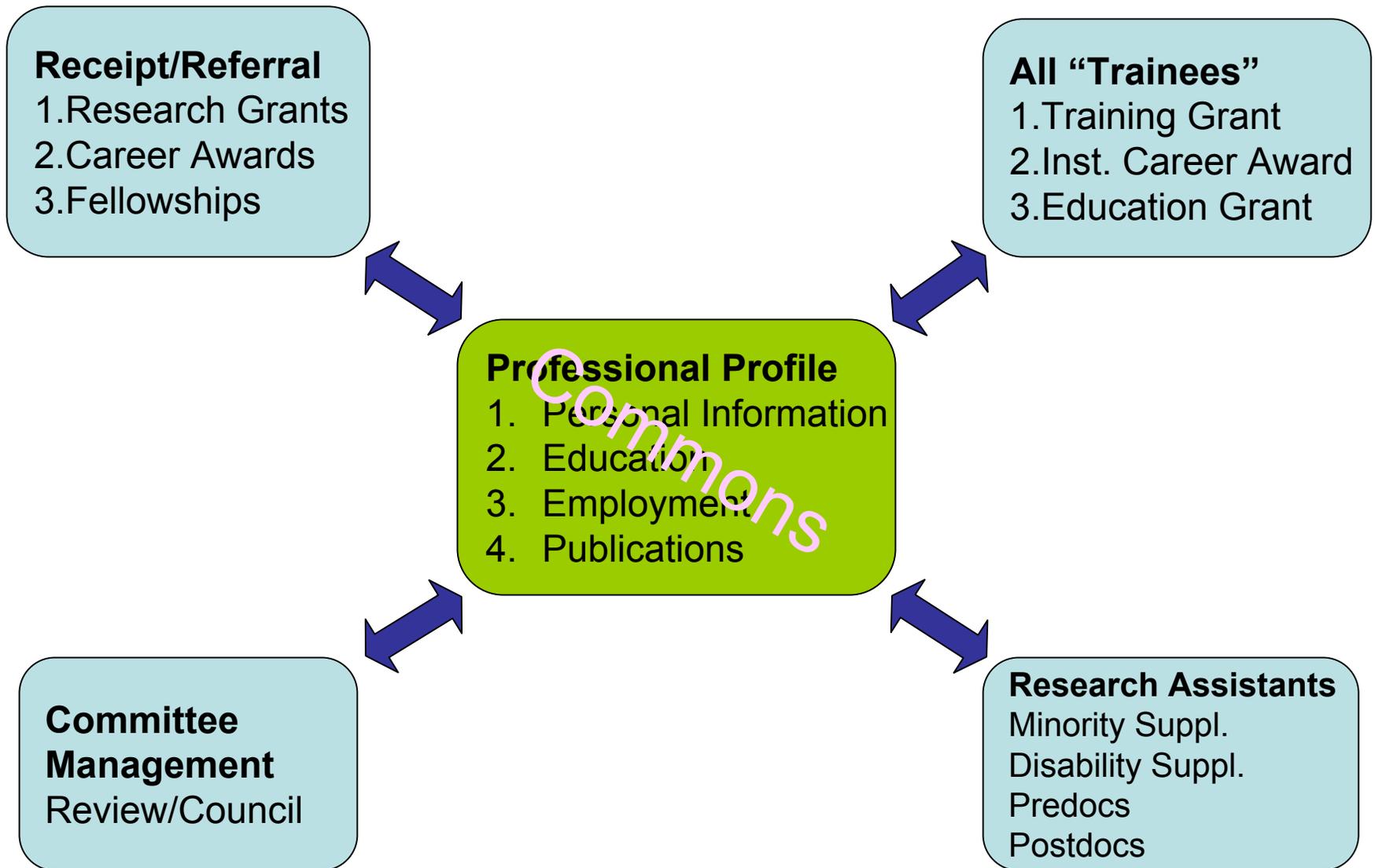
4. Publications

- NLM Accession Number
- Citation Text

Current PPF Data Entry Model



Future PPF Data Entry Model



**Department of Health and Human Services
Public Health Services
Statement of Training Appointment**
(Please Type)

Follow attached instructions carefully. Submit this form at the time the individual is appointed, is reappointed, or the reported appointment is amended. Return this form to the PHS awarding component. For new postdoctoral trainees under NRSA, signed and dated payback agreement **must** accompany this form.

1. PHS GRANT NUMBER Type Activity ID Serial No.		2. TRAINEE'S NAME (<i>Last, first, initial</i>)	3. SEX <input type="checkbox"/> M <input type="checkbox"/> F
4. TYPE OF ACTION (<i>Mark X for only one type</i>) <input type="checkbox"/> NEW appointment (NOT previously supported by this grant) <input type="checkbox"/> REAPPOINTMENT (Previously supported by this grant) <input type="checkbox"/> AMENDMENT of items checked: <input type="checkbox"/> 2 <input type="checkbox"/> 9 <input type="checkbox"/> 13 <input type="checkbox"/> 18		5. PRIOR SUPPORT (<i>Individual or institutional</i>) <input type="checkbox"/> NO <input type="checkbox"/> YES (If "Yes," see instructions)	
6. SOCIAL SECURITY NO.	7. BIRTHDATE (<i>Month, day, year</i>)	8. CITIZENSHIP (<i>See instructions</i>) <input type="checkbox"/> U.S. Citizen or U.S. Noncitizen National <input type="checkbox"/> Permanent Resident of U.S.	
9. PERMANENT MAILING ADDRESS e-mail:		10. Are you Hispanic (or Latino)? <i>Mark (X)</i> <input type="checkbox"/> YES <input type="checkbox"/> NO	
12. FIELD OF TRAINING Enter a 4 digit code from instructions: <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	11. What is your racial background? <i>Mark (X) one or more</i> <input type="checkbox"/> American Indian or Alaska Native <input type="checkbox"/> Native Hawaiian or other Pacific Islander <input type="checkbox"/> Asian <input type="checkbox"/> Black or African American <input type="checkbox"/> White		
13. PERIOD OF APPOINTMENT (<i>Month, day, year</i>)			

14. EDUCATION—AFTER HIGH SCHOOL (*Indicate all academic and professional education. For foreign degrees, give U.S. equivalent.*)

(a) Name of Institution, Department and Location <i>(List most recent first.)</i>	(b) Month and Year Attended		(c) Degree(s) Received		(d) Major Field	(e) Minor Field
	From	To	Degree	Mo. & Yr.		

15. NAMES OF SPECIALTY BOARDS	18. SUPPORT FOR PERIOD OF APPOINTMENT	
16. DEGREE(S) SOUGHT Are you in a double degree program (e.g., M.D./Ph.D.)? <input type="checkbox"/> YES <input type="checkbox"/> NO	Type Stipend Tuition/fees (<i>estimated</i>) Travel (<i>estimated</i>) TOTAL	Total for This Grant (<i>Omit cents.</i>) \$ \$ \$ \$
17. COMPLETION DATE		

19. STATEMENT OF NONDELINQUENCY ON FEDERAL DEBT. Is the trainee delinquent on the repayment of any Federal debt(s)?
 NO YES (*If "Yes," please explain below. Use additional pages if necessary.*)

20. CERTIFICATION AND ACCEPTANCE: I certify that the statements herein are true and complete to the best of my knowledge and that I will comply with all applicable Public Health Service terms and conditions governing my appointment. I am aware that any false, fictitious or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties.	(a) SIGNATURE OF TRAINEE	(b) DATE
---	--------------------------	----------

21. This individual is qualified for this program and is eligible to receive financial support for the period specified above. A copy of this appointment form will be given to the individual.	(a) SIGNATURE OF PROGRAM DIRECTOR	(b) DATE
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(a) TYPED NAME OF PROGRAM DIRECTOR	(b) INSTITUTION'S NAME, ADDRESS, AND PHONE NO. <i>(Street, city, state, zip code)</i>
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(c) SCHOOL	(d) DEPARTMENT
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Department of Health and Human Services
Public Health Services
Statement of Training Appointment
(Please Type)

Follow attached instructions carefully. Submit this form at the time the individual is appointed, is reappointed, or the reported appointment is amended. Return this form to the PHS awarding component. For new postdoctoral trainees under NRSA, signed and dated payback agreement **must** accompany this form.

	2. TRAINEE'S NAME (Last, first, initial)
--	--

4. TYPE OF ACTION (Mark X for only one type)

NEW appointment (NOT previously supported by this grant)

REAPPOINTMENT (Previously supported by this grant)

AMENDMENT of items checked: 2 9 13 18

5. PRIOR SUPPORT (Individual or institutional)

NO YES (If "Yes," see instructions)

6. SOCIAL SECURITY NO. 7. BIRTHDATE (Month, day, year)

12. FIELD OF TRAINING

Enter a 4 digit code from instructions:

13. PERIOD OF APPOINTMENT (Month, day, year)

15. NAMES OF SPECIALTY BOARDS

18. SUPPORT FOR PERIOD OF APPOINTMENT		Total for This Grant (Omit cents.)
Type		
Stipend		\$
Tuition/fees (estimated)		\$
Travel (estimated)		\$
TOTAL		\$

16. DEGREE(S) SOUGHT

Are you in a double degree program (e.g., M.D./Ph.D.)? YES NO

17. COMPLETION DATE

19. STATEMENT OF NONDELINQUENCY ON FEDERAL DEBT. Is the trainee delinquent on the repayment of any Federal debt(s)?

NO YES (If "Yes," please explain below. Use additional pages if necessary.)

Simplified Appointment Process

1. Unambiguous linkage to Existing Professional Profile using
 - name
 - SSN
 - DOB
 - assigned identifier
2. Information about Appointment
 - Date of appointment
 - Completion date of appointment
3. Remainder of Information in PPF
4. Strong incentive to update PPF
5. Required for every transaction

Development of a Training Evaluation Database

- Data structure designed for career tracking and evaluation
 - Personal Information
 - Education
 - Employment
 - Publications
 - Transactions – Role Records (applications, awards, traineeship, fellowships, reviewer, inventions, etc.)
 - Incorporate existing TFF, CGAF, and Master Index
 - Links to institutional attributes or rankings
 - Links to external databases with updates as needed
 - SED
 - SDR
 - FRS
 - IRP
 - LRP?
- Develop routine reporting tools
- External linkages can be used to verify data items

To Do List

- Clear concept
- Establish workgroup
- Design tasks
 - Redesign X-Train
 - Redesign TA (to include part-time training)
 - Redesign SITS
 - Design NIH eRA Commons RA appointment module (K12, R25, other Rs)
 - Design table-view to accommodate RA appointment information
 - Design data warehouse (preserve existing records)
 - Design data warehouse update process and schedule
 - Identify external data sources and elements of interest
 - Design reporting modules
- Prepare cost estimates and justification for funding